

MAR 07 2007

Application No. 10/797,984  
Amendment dated  
After Final Office Action of January 8, 2007

Docket No.: 65807-0065

22. (Original) A method as described in Claim 20, further comprising determining whether the network communications are within frequency and voltage specifications for the network.

23. (Presently Presented) A method as described in Claim 20, further comprising analyzing transmission characteristics of the network analysis by driving a predetermined signal out onto the network and detecting the response of the network.

#### REMARKS

This response is intended to be fully responsive to the final office action ("office action") having a mailing date of January 8, 2007, wherein claims 1 and 13-23 were rejected. Independent claims 1 and 13 have been amended as discussed below. No claims have been cancelled.

For the reasons stated below, Applicant does not believe that the references discussed below do not teach or suggest all of the elements of the independent claims. Further, Applicant believes that many if not all of dependent claims recite separately patentable subject matter, and therefore Applicant reserves the right to address dependent claims not specifically addressed herein in subsequent papers.

#### Terminal Disclaimer

In the terminal disclaimer filed on October 25, 2006, Applicants incorrectly identified the patent number being disclaimed. The terminal disclaimer has been corrected to correctly identify patent number 6,795,402 and is being filed with this response. While Applicant disagrees with any suggestion that the claims might not be independently patentable over U.S. Patent No. 6,795,402, terminal disclaimer is enclosed to facilitate prosecution.

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**Claim Rejections – 35 U.S.C. § 103**

**I. Rejection of claims 1, and 13-18**

Claims 1-2 {sic} and 13-18 were rejected as being unpatentable over Keisling et al. (U.S. patent no. 5,664,105) in view of Walsh (U.S. patent no. 5,365,509).<sup>1</sup>

In the office action the Examiner repeats the same rejections made in the last office action. In the Response to the last office action, Applicants noted that Keisling does not classify the signal events as network communications, noise, interference and/or crosstalk and that the references includes absolutely no mention of these features. The Applicants also addressed the cited portion of Keisling related to the use of frames including quoting from portions of Keisling. Significantly, as noted in the response, Keisling is directed to looking at specific frames of data packets and is no more relevant than the prior art discussed in the Background of the Invention. There are a number of problems with such a prior art approach as discussed in the Background. Moreover, prior art systems such as the one disclosed in Keisling operate on the assumption that the physical layer, hardware and media are operational.

The Examiner confirmed in the final office action that he is relying on the frames disclosed in Keisling and that Keisling allegedly discloses a method and system for classifying “the signal events ‘frames’ into local collisions, remote collisions, ghost or other ‘frame data’ wherein noise ‘ghost’, local and remote location {sic} ‘interference or crosstalk.’” (Office action, Page 6). However, once again no support for the recited terminology is provided in the office action.

As discussed in the last response, there is no suggestion to combine the references. The Examiner disagreed noting that the motivation would have to detecting a faulty network device. (Office action, Page 7).

Even if there were a suggestion to combine even at the very high level asserted by the Examiner, the combination still fails. Significantly, Keisling expressly teaches away from the

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<sup>1</sup> Claim 2 was cancelled previously so is not pending.

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claimed invention. It relies on the frame data for its analysis while the claimed invention is directed to using a digitizer to digitally sample analog characteristics of digital communication events to determine analog characteristics (e.g., time or voltage) and does not care about contents of the frame data itself. Thus, even if the alleged motivation were adequate, the references cannot be combined as suggested by the Examiner.

To more clearly articulate the inability to combine the references, the different teachings of the references, and taking into account the Examiner's comments with respect to the cited portion of page 7 of the specification in the remarks at page 7 of the office action, independent claims 1 and 13 have been amended to recite that the digitizer digitally samples analog characteristics of digital communication events between network device connected to the network independently of packet contents associated with any of the digital communication events, the analog characteristics including a component of at least one of voltage and frequency, the samples taken at least at one of a rate and a resolution greater than is required to minimally detect digital transitions. Further the two independent claims, as amended, recite that the signal events are either decoded or classified to selectively predict a failure mode.

Support for the amendments can be found throughout the specification, including for example, the discussion at pages 7 and 8 of the application.

In the last response, the Applicants also addressed the separate patentability of a number of dependent claims, including claim 16. It is respectfully submitted that the prior art of record does not teach a recitation of identifying sources of transmissions on a network by calculating parameters for transmissions from known sources, calculating the parameters for a transmission from an unknown source, and identifying the unknown source based upon the degree to which the parameters match parameters from the known sources. Nor has the Examiner provided the basis for maintaining the rejection of claim 16.

## II. Rejection of claims 19-23

Claims 19 through 23 are dependent upon independent claim 13. The same arguments made above with respect to claim 13 are equally applicable to the dependent claims.

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**CONCLUSION**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 65807-0065 from which the undersigned is authorized to draw.

Dated: March 7, 2007

Respectfully submitted,

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